
Cord Compound N90CD Data Sheet

Material: Nitrile (Buna-N)
90 Durometer, Black

General Information:

Nitrile, Buna, or NBR is one of the most common sealing elastomers due to its resistance to petroleum-based fuels and lubricants. Nitrile elastomers are copolymers of acrylonitrile and butadiene

Cure System: *Sulfur-cured*

Sulfur-cured compounds offer better low temperature properties but are more prone to hardening with high temperatures. Peroxide-cured nitriles have better heat resistance and lower compression sets but are more expensive and are more difficult to process.

Temperature Range: -40°C (-40°F) to 100°C (212°F)

Attributes:

Color: Black

Durometer Shore A: 90±5

Shelf-life: 15 years

Performs Well In:

- Petroleum based oils & fuels
- Aliphatic hydrocarbons
- Vegetable oils
- Silicone oils & greases
- Ethylene glycol
- Dilute acids
- Water to below 100°C (212°F)

Doesn't Perform Well In:

- Aromatic hydrocarbons
- Automotive brake fluid
- Chlorinated hydrocarbons
- Ketones
- Ethers
- Esters
- Phosphate ester hydraulic fluids
- Strong acids
- Ozone / weathering / sunlight

Request A Quote



TEST REPORT FOR CORD COMPOUND N90CD

MATERIAL: NITRILE (BUNA-N)

DUROMETER: 90

COLOR: BLACK

ASTM* M7BG 910 B14 EO14 EO34 F16

N
9
0
C
D

SECTION OF SPEC.	PROPERTIES	REQUIREMENTS	RESULTS	ASTM TEST METHOD
	ORIGINAL PROPERTIES			
	Durometer Hardness	90±5	89	D2240
	Tensile Strength	1450	2040	D412
	% Ultimate Elongation	100	125	D412
B14	COMPRESSION SET			
	22 hours at 100°C			D395
	% Compression Set	25 MAX.	20.9	
EO14	OIL RESISTANCE ASTM OIL NO. 1			
	70 hours at 100°C			
	Hardness (Points Change)	-5 TO +10	+4	D471
	Tensile (% Change)	-25 MAX.	-1.9	
	Elongation (% Change)	-45 MAX.	-10	
	Volume (% Change)	-10 TO +5	-1.1	
EO34	OIL RESISTANCE ASTM OIL NO. 3			
	70 hours at 100°C			
	Hardness (Points Change)	-10 TO +5	-9	D471
	Tensile (% Change)	-45 MAX.	-13.3	
	Elongation (% Change)	-45 MAX.	-10	
	Volume (% Change)	0 TO +25	+16.1	
F16	LOW TEMPERATURE RESISTANCE			
	3 minutes at -35°C			D2137
	Brittle Point	NON-BRITTLE	PASS	

*American Society for Testing and Materials